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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,057	09/28/2001	Giovanna Barbarella	3797IN-1-CIP	7383

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SHERIDAN ROSS PC
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

EXAMINER

YAMNITZKY, MARIE ROSE

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

SC

Office Action Summary	Application No.	Applicant(s)	
	09/967,057	BARBARELLA ET AL.	
	Examiner	Art Unit	
	Marie R. Yamnitzky	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004 and Decision mailed 10 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Claims 9-14 have been cancelled and claims 15-22 have been added as set forth in the amendment received August 01, 2003. Applicant's arguments filed August 01, 2003 have been fully considered.

The specification has been amended as set forth in the amendment received January 20, 2004 (copy of amendment originally filed October 23, 2003).

Claims 15-22 are pending.

2. With respect to the amendment to the specification, the examiner notes that the paragraph regarding support that follows the amended table has been presented as part of the amendment section rather than as part of the remarks section. At such time as the application is otherwise found to be in condition for allowance, the examiner will correct this error by examiner's amendment unless corrected by applicant. If applicant makes any further amendment to Table 2, the support paragraph included in the current amendment should be presented with strikethrough in order to delete the paragraph from the specification. Otherwise, the support paragraph will appear as part of the specification in any patent issuing from this application.

3. Copendency with prior Application No. 09/540,659, filed March 31, 2000, has been established. Accordingly, applicant has complied with the conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120, and applicant's claim for priority under 35 U.S.C. 119(a)-(d) based on an application filed in Italy on April 01, 1999 is proper.

Based on the establishment of copendency with the '659 application, the published application of Yamada et al. (US 2002/0034658 A1) is withdrawn as prior art.

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The filing dates set forth in the declaration with respect to the prior foreign and U.S. applications are incorrect.

5. The issues raised with respect to the declaration are not overcome by the establishment of copendency with Application No. 09/540,659. Compare the dates set forth in the declaration to the dates listed in the application transmittal letter.

The '659 application was filed March 31, 2000, but the declaration lists the filing date of this U.S. priority application as October 24, 2000.

The foreign priority application was filed in Italy on April 01, 1999, but the declaration lists the filing date of the prior foreign application as October 24, 2001.

6. The amendment filed on January 20, 2004 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Table 2 as amended.

In amending Table 2, applicant states that support for the third and eighth molecular structures is provided by original claim 5. While the molecular structures, per se, are supported by original claim 5, it is not clear from the original disclosure that the two formulae that were

overlapped at line 20 of page 8 of the original specification were necessarily the formulae for the compounds having the third and eighth sets of data for η (%) and $\lambda_{(PL)}$ (nm), and that the two formulae represent compounds having η (%) and $\lambda_{(PL)}$ (nm) as shown in amended Table 2. It cannot be determined from the original application papers that amended Table 2 has the correct correlation between Sample Molecular Structure, η (%) and $\lambda_{(PL)}$ (nm).

Applicant is required to cancel the new matter in the reply to this Office Action, or provide objective evidence demonstrating that amended Table 2 has the correct correlation between Sample Molecular Structure, η (%) and $\lambda_{(PL)}$ (nm).

7. Claims 15-19 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 15-19 are drawn to a light emitting device, require the light emitting device to be made entirely of an organic material, and require power supply elements to be directly incorporated in a film including a thiophene-S,S-dioxide compound. Since the power supply elements are components of the light emitting device, the power supply elements must be made of an organic material in order for the light emitting device to be made entirely of an organic material. However, while the original disclosure generically recited "power supplying elements", there was no description as to what these power supplying elements were made of.

Accordingly, it is not clear that the inventor(s), at the time the application was filed, had possession of the invention as claimed in claims 15-19.

Claims 15-19 also require "at least one film (3) formed of a luminescent material including at least a light emitting thiophene-S,S-dioxide compound which is not encapsulated". While the paragraph bridging pages 1 and 2 of the specification indicates that encapsulation of the light emitting device, as a whole, is not necessary, it is not clear that an individual film including thiophene-S,S-dioxide, or the thiophene-S,S-dioxide itself, is not encapsulated within the overall device structure.

Claim 22 is drawn to a method of making an electric contact device. The examiner does not find the phrase "electric contact device" in the application as originally filed and, because the scope of an electric contact device is not clear, it is not clear that the inventor(s), at the time the application was filed, had possession of the invention as claimed in claim 22.

8. Claims 15-20 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of "power supply elements" as required by claims 15-19 and a "power supply element" as required by claim 20 is not clear.

Claims 15-19: In reciting "which is not encapsulated", it is not clear what "which" refers to. It is not clear if "which" refers to the thiophene-S,S-dioxide compound, the luminescent material, or the at least one film.

Claims 15-19: It is not clear what, if any, structure(s) is/are being excluded by the language "without the necessity of contacting or welding", given the open language of the claims. While contacting or welding may not be a necessity, it is not clear if contacting or welding may be included/utilized. The scope of "contacting" and "welding" are also not clear. In particular, with respect to the term "contacting", it is reasonable to expect that a power supply element that is incorporated in a film is in contact with the film.

Claim 20: It is not clear what is being claimed. The preamble recitation of "electric contact for a power supply element" implies that the power supply element is an intended use or a part of an intended use, and is not a component of the electric contact. However, the electric contact is claimed as "comprising: an organic film... wherein the power supply element is directly embedded in said organic film." It is not clear if the limitations of the "electric contact" of claim 20 are met by an organic film including a light emitting thiophene-S,S-dioxide compound alone, or if the claimed contact is the combination of organic film and embedded power supply element. If the claimed contact is the combination of organic film and embedded power supply element, then the preamble recitation of "for a power supply element" is confusing.

Claim 22: The scope of an "electric contact device" is not clear.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Arbizanni et al. in *Optical Materials*, Vol. 9, pp. 43-45 (January 1998).

The prior art discloses thiophene-S,S-dioxide compounds and, based on their molecular structure, it is reasonable to expect that the thiophene-S,S-dioxide compounds disclosed in the prior art are inherently capable of emitting light.

The prior art's teaching of the synthesis of substrates containing thiophene-S,S-dioxide compounds, and the prior art's teaching of the use of thiophene-S,S-dioxide compounds as semiconductors in junction diodes, anticipates an organic film including a thiophene-S,S-dioxide compound (see the paragraph bridging the two columns on page 45).

The teaching of the use of thiophene-S,S-dioxide compounds as semiconductors in junction diodes anticipates a method in which an organic film including a thiophene-S,S-dioxide compound is provided, and an electrical current is applied to the film as required by the method of claims 21 and 22.

Claim 20 is included in this rejection subject to clarification of the claim limitations.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 6:30 a.m. to 4:00 p.m. Monday, Tuesday, Thursday and Friday, and every other Wednesday from 6:30 a.m. to 3:00 p.m.

The current fax number for Art Unit 1774 is (703) 872-9306 for all official faxes. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

MRY

August 23, 2004



MARIE YAMNITZKY
PRIMARY EXAMINER

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